



7400, 7600 and Ultimate Series Motorized Roller

Installation, Maintenance and Parts Manual



7400

7600

7600 Ultimate

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Introduction

A CAUTION

Some illustrations may show guards removed. DO NOT operate equipment without guards.

Upon receipt of shipment:

- Compare shipment with packing slip. Contact factory regarding discrepancies.
- Inspect packages for shipping damage. Contact carrier regarding damage. Accessories may be shipped loose.
- See accessory instructions for installation.

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The Dorner Limited Warranty applies.

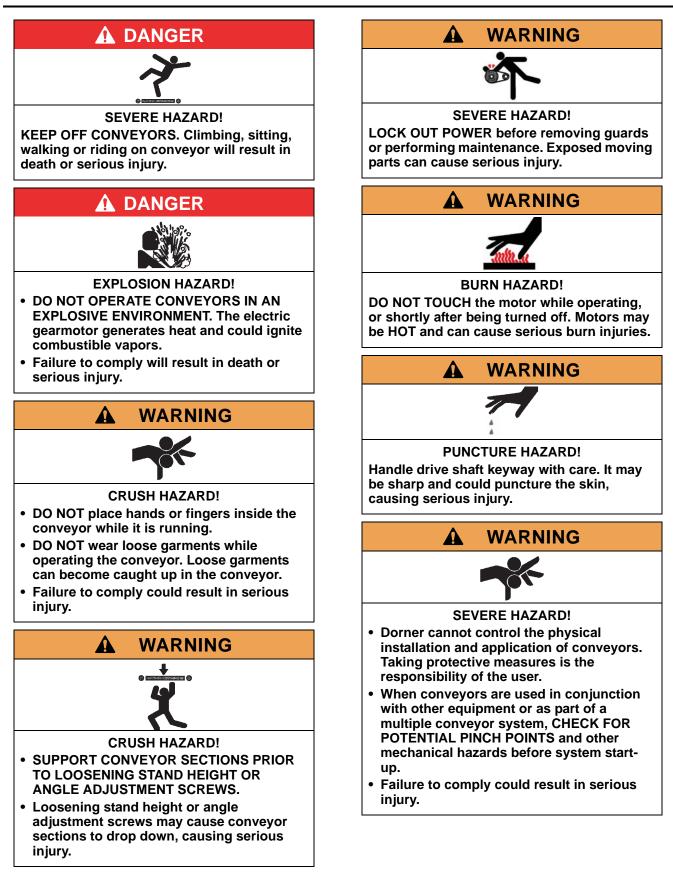
Dorner AquaPruf conveyors are covered by Patent Numbers 7,207,435, 7,246,697, 7,383,944, additional patent pending applications, and corresponding patents in other countries.

Dorner reserves the right to make changes at any time without notice or obligation.

Dorner has convenient, pre-configured kits of Key Service Parts for all conveyor products. These time saving kits are easy to order, designed for fast installation, and guarantee you will have what you need when you need it. Key Parts and Kits are marked in the Service Parts section of this manual with the Performance Parts Kits logo

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Warnings – General Safety



Product Description

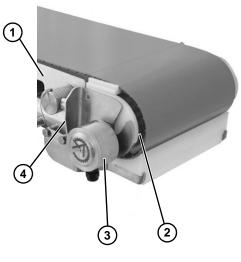
Refer to (Figure 1) for typical motorized roller components.

Typical Components

- 1 Conveyor
- 2 Motorized Roller
- 3 Terminal Box
- 4 Mounting Bracket

NOTE

The 7600 Ultimate Motorized Roller is shown above, but the 7400 and 7600 Motorized Rollers contain similar components.

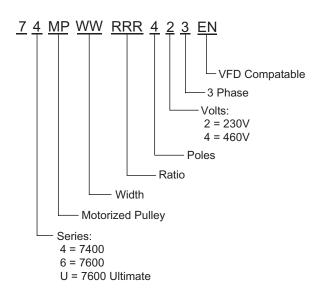




Specifications

Motorized Roller Models

Example:



Specifications

Motorized Roller Specifications

	Three Phase
Output Power	0.50 hp (0.37 kW)
Input Voltage	230 / 460 V.A.C.
Input Frequency	20 – 60 Hz
Motor RPM	See Below
Roller Ratios	See Below
Motor Type	Totally Enclosed, Non-ventilated, IP66

Fixed Speed Motorized Roller

		7400 Be	It Speed		ltimate eed	7600 Be	It Speed		12"	wide con	veyor			14" - 46	6 ["] wide o	conveyor	
Motorized Roller	Ratio	ft / min	M / min	ft / min	M / min	ft / min	M / min	torque (in • lb)	torque (N • m)	HP⁺	Amps @230V*	Amps @460V*	torque (in • lb)	torque (N • m)	HP⁺	Amps @230V*	Amps @460V*
7xMPww0304v3EN	30	80	24	85	26	70	21	388	44	0.33	1.1	0.6	588	66	0.5	2.0	1.0
7xMPww0244v3EN	24	100	30	110	34	95	29	309	35	0.33	1.1	0.6	468	53	0.5	2.0	1.0
7xMPww0204v3EN	20	120	37	130	40	110	34	261	30	0.33	1.1	0.6	396	45	0.5	2.0	1.0
7xMPww0184v3EN	18	130	40	140	43	120	37	230	26	0.33	1.1	0.6	348	39	0.5	2.0	1.0
7xMPww0164v3EN	16	150	46	160	49	140	43	206	23	0.33	1.1	0.6	312	35	0.5	2.0	1.0
7xMPww0154v3EN	15	165	50	175	53	150	46	190	21	0.33	1.1	0.6	288	33	0.5	2.0	1.0
7xMPww0134v3EN	13	195	59	205	62	180	55	166	19	0.33	1.1	0.6	252	28	0.5	2.0	1.0
7xMPww0114v3EN	11	215	66	230	70	200	61	143	16	0.33	1.1	0.6	216	24	0.5	2.0	1.0
7xMPww0104v3EN	10	230	70	240	73	210	64	135	15	0.33	1.1	0.6	204	23	0.5	2.0	1.0
7xMPww0094v3EN	9	255	78	270	82	235	72	119	13	0.33	1.1	0.6	180	20	0.5	2.0	1.0

Where x = Conveyor type; 4 = 7400, 6 = 7600, U = 7600 Ultimate; ww = width (12'' - 46''); v = voltage; 2 = 230V, 4 = 460V

* Refer to "Ordering and Specifications" Catalog for details.

Variable Speed Motorized Roller

		7400 Bel	t Speed		ltimate eed	7600 Be	It Speed		12" v	wide conv	/eyor			14" - 40	6 ["] wide c	onveyor	
Motorized Roller	Ratio	ft / min	M / min	ft / min	M / min	ft / min	M / min	torque (in • lb)	torque (N • m)	HP∗	Amps @230V*	Amps @460V*	torque (in • lb)	torque (N • m)	HP⁺	Amps @230V*	Amps @460V*
7xMPww0304v3EN	30	27 - 80	8 - 24	28 - 85	9 - 26	23 - 70	7 - 21	388	44	0.33	1.1	0.6	588	66	0.5	2.0	1.0
7xMPww0244v3EN	24	33 - 100	10 - 30	37 - 110	11 - 34	32 - 95	10 - 29	309	35	0.33	1.1	0.6	468	53	0.5	2.0	1.0
7xMPww0204v3EN	20	40 - 120	12 - 37	43 - 130	13 - 40	37 - 110	11 - 34	261	30	0.33	1.1	0.6	396	45	0.5	2.0	1.0
7xMPww0184v3EN	18	43 - 130	13 - 40	47 - 140	14 - 43	40 - 120	12 - 37	230	26	0.33	1.1	0.6	348	39	0.5	2.0	1.0
7xMPww0164v3EN	16	50 - 150	15 - 46	53 - 160	16 - 49	47 - 140	14 - 43	206	23	0.33	1.1	0.6	312	35	0.5	2.0	1.0
7xMPww0154v3EN	15	55 - 165	17 - 50	58 - 175	18 - 53	50 - 150	15 - 46	190	21	0.33	1.1	0.6	288	33	0.5	2.0	1.0
7xMPww0134v3EN	13	65 - 195	20 - 59	68 - 205	21 - 62	60 - 180	18 - 55	166	19	0.33	1.1	0.6	252	28	0.5	2.0	1.0
7xMPww0114v3EN	11	72 - 215	22 - 66	77 - 230	23 - 70	67 - 200	20 - 61	143	16	0.33	1.1	0.6	216	24	0.5	2.0	1.0
7xMPww0104v3EN	10	77 - 230	23 - 70	80 - 240	24 - 73	70 - 210	21 - 64	135	15	0.33	1.1	0.6	204	23	0.5	2.0	1.0
7xMPww0094v3EN	9	85 - 255	26 - 78	90 - 270	27 - 82	78 - 235	24 - 72	119	13	0.33	1.1	0.6	180	20	0.5	2.0	1.0

Where x = Conveyor type; 4 = 7400, 6 = 7600, U = 7600 Ultimate; ww = width (12'' - 46''); v = voltage; 2 = 230V, 4 = 460V

* Refer to "Ordering and Specifications" Catalog for details.

NOTE

Contact the factory for details about belt speeds other than those listed.

Installation

Required Tools

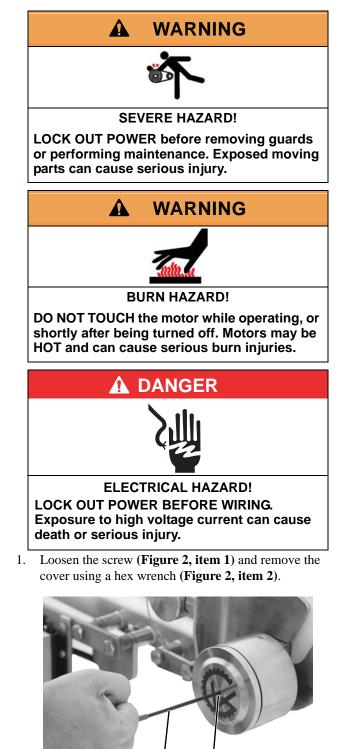
- 3 mm hex wrench
- Cord grip supplied by customer

Drive Package Installation



All motorized roller drive packages are shipped installed on the conveyor. If through shipment your unit has moved or requires assembly. See "Preventive Maintenance and Adjustment" on page 8.

Motorized Roller Wiring





Installation

2. Note wiring diagram (Figure 3, item 1) on the inside of the terminal box.



Figure 3

3. Install appropriate cord grip (Figure 4, item 1) to the terminal box (Figure 4, item 2).



Figure 4

4. Install cord with wires (Figure 5, item 1).

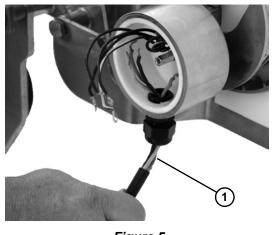
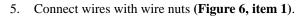


Figure 5



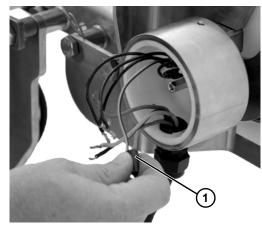


Figure 6

6. Attach the cover (Figure 7, item 1) with the screw using a hex wrench (Figure 7, item 2).

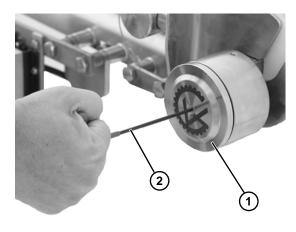


Figure 7

Required Tools

- 3 mm hex wrench
- 17 mm wrench
- Large flat head screwdriver

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 13 for recommendations.
- Replace any worn or damaged parts.

Cleaning

Routine Cleaning



Dorner recommends cleaning the inside and the outside of the conveyor on a daily basis.

See the appropriate conveyor manual for proper cleaning instructions.

Periodic Cleaning

Dorner recommends complete disassembly of the conveyor periodically for thorough cleaning.

Refer to the appropriate conveyor manual for proper cleaning instructions. Remove the conveyor belt as instructed.

Refer to "Sprocket Removal" on page 12.

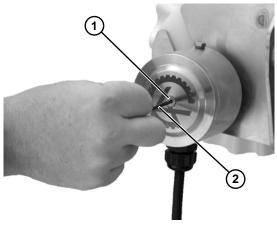
Motorized Roller Replacement

7600 Series Conveyor



Refer to the appropriate conveyor manual. Remove conveyor belt.

1. Loosen the screw (Figure 8, item 1) and remove the cover using a hex wrench (Figure 8, item 2).





2. Note wiring diagram (Figure 9, item 1) on the inside of the terminal box.





3. Remove wire nuts (Figure 10, item 1) from wires.

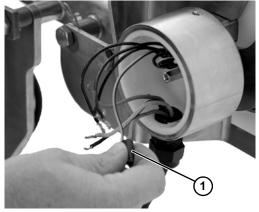


Figure 10

4. Remove cord (Figure 11, item 1) from cord grip.

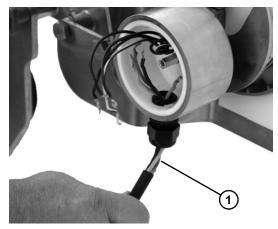


Figure 11

5. Remove belt support blocks (Figure 12, item 1).

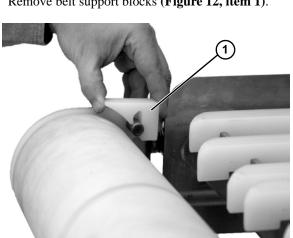
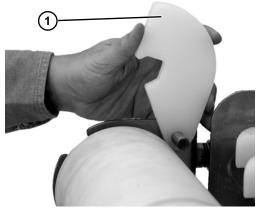


Figure 12

6. Pivot up roller locking plates (Figure 13, item 1).





7. Lift out roller (Figure 14, item 1).

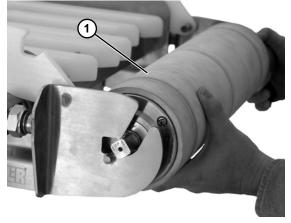


Figure 14 Reverse order to install new roller.

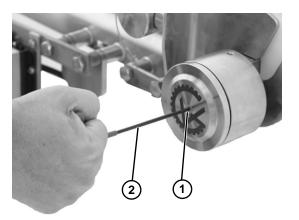
8.

7400 and 7600 Ultimate Series Conveyor



Refer to the appropriate conveyor manual. Remove conveyor belt.

1. Loosen the screw (Figure 15, item 1) and remove the cover using a hex wrench (Figure 15, item 2).





2. Note wiring diagram (Figure 16, item 1) on the inside of the terminal box.



Figure 16

3. Remove wire nuts (Figure 17, item 1) from wires.

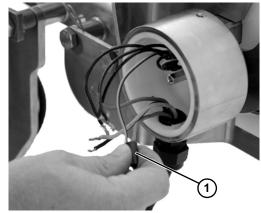
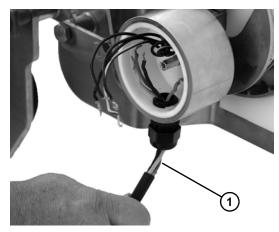


Figure 17

4. Remove cord (Figure 18, item 1) from cord grip.





5. Remove belt support blocks (Figure 19, item 1).

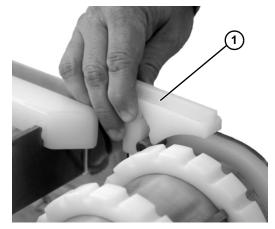


Figure 19

6. Pivot up roller locking plates (**Figure 20, item 1**).

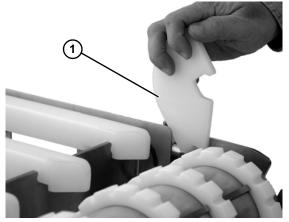


Figure 20

7. Lift out roller (Figure 21, item 1).

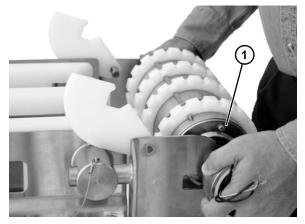


Figure 21

8. Pry up retaining ring (**Figure 22, item 1**) with large blade screwdriver (**Figure 22, item 2**).

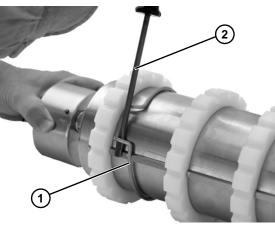


Figure 22

9. Remove clamp key (Figure 23, item 1).

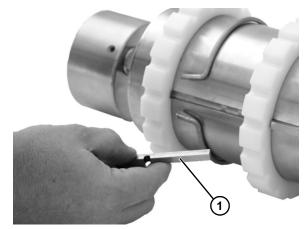


Figure 23

10. Slide out end sprocket (**Figure 24, item 1**) and remove end key (**Figure 24, item 2**). Slide end sprocket off roller.

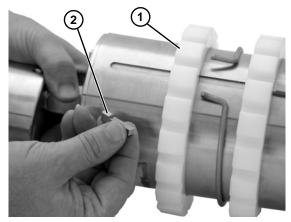


Figure 24

11. Slide retaining ring off roller (Figure 25, item 1).



Figure 25

12. Slide out next sprocket (**Figure 26, item 1**) and remove next key (**Figure 26, item 2**). Repeat until all sprockets and keys are removed.

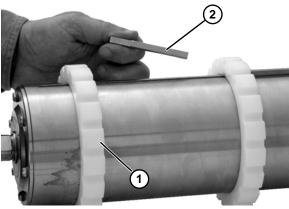


Figure 26

13. Reverse order to install new roller.

Sprocket Removal

7400 and 7600 Ultimate Series Conveyor



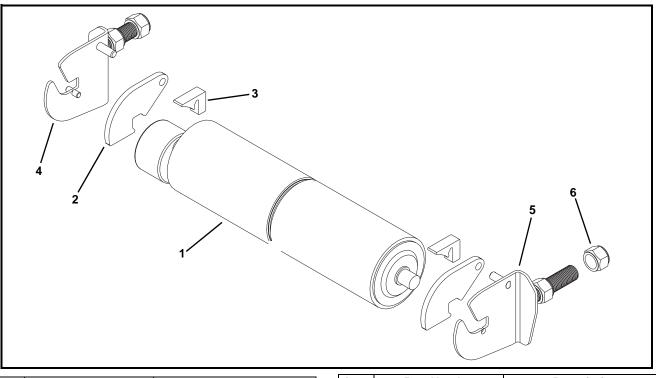
NOTE

To remove the sprockets the motorized roller must be fully removed. See "Motorized Roller Replacement" on page 8.

NOTE

For replacement parts other than those shown in this section, contact an authorized Dorner Service Center or the factory. Key Service Parts and Kits are identified by the Performance Parts Kits logo 🚍 . Dorner recommends keeping these parts on hand.

7600 Motorized Roller

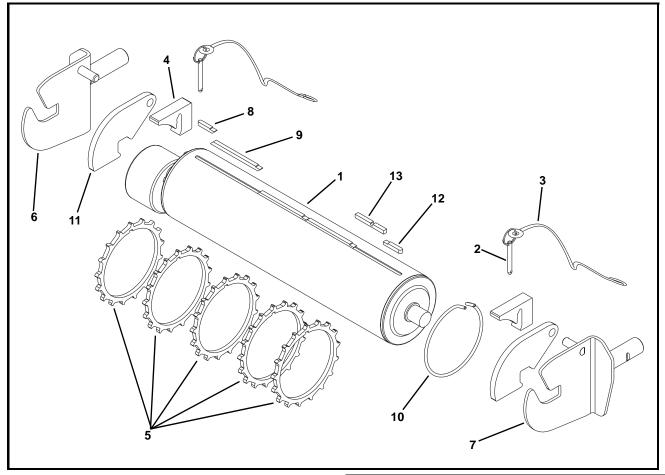


Item	Part Number	Description
1	76MP(WW)030423EN	Motorized Roller, 30:1, 230V
	76MP(WW)024423EN	Motorized Roller, 24:1, 230V
	76MP(WW)020423EN	Motorized Roller, 20:1, 230V
	76MP(WW)018423EN	Motorized Roller, 18:1, 230V
	76MP(WW)016423EN	Motorized Roller, 16:1, 230V
	76MP(WW)015423EN	Motorized Roller, 15:1, 230V
	76MP(WW)013423EN	Motorized Roller, 13:1, 230V
	76MP(WW)011423EN	Motorized Roller, 11:1, 230V
	76MP(WW)010423EN	Motorized Roller, 10:1, 230V
	76MP(WW)009423EN	Motorized Roller, 9:1, 230V
	76MP(WW)030443EN	Motorized Roller, 30:1, 460V
	76MP(WW)024443EN	Motorized Roller, 24:1, 460V
	76MP(WW)020443EN	Motorized Roller, 20:1, 460V
	76MP(WW)018443EN	Motorized Roller, 18:1, 460V
	76MP(WW)016443EN	Motorized Roller, 16:1, 460V
	76MP(WW)015443EN	Motorized Roller, 15:1, 460V
	76MP(WW)013443EN	Motorized Roller, 13:1, 460V
	76MP(WW)011443EN	Motorized Roller, 11:1, 460V
	76MP(WW)010443EN	Motorized Roller, 10:1, 460V
	76MP(WW)009443EN	Motorized Roller, 9:1, 460V

Item	Part Number	Description		
2	506247	Swing Locking Guard		
3	500051	Guard Block		
4	500058	Right Hand Ear Assembly		
5	500059	Left Hand Ear Assembly		
6	500791	Nut		
Motorized roller part numbers (where (WW) = width)				

7400, 7600 and Ultimate Series Motorized Roller

7400 Motorized Roller

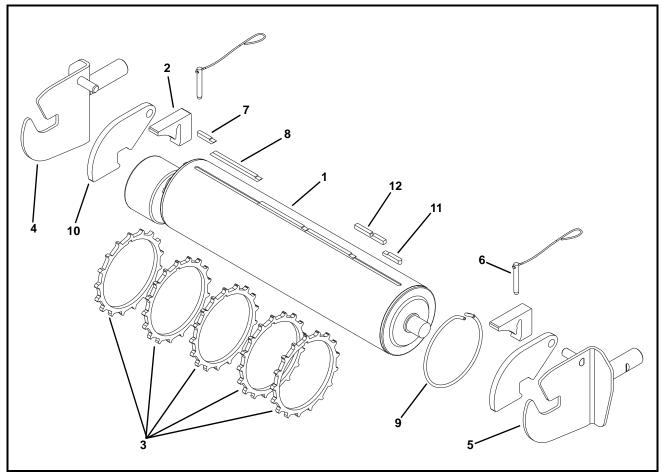


ltem	Part Number	Description
1	74MP(WW)030423EN	Motorized Roller, 30:1, 230V
	74MP(WW)024423EN	Motorized Roller, 24:1, 230V
	74MP(WW)020423EN	Motorized Roller, 20:1, 230V
	74MP(WW)018423EN	Motorized Roller, 18:1, 230V
	74MP(WW)016423EN	Motorized Roller, 16:1, 230V
	74MP(WW)015423EN	Motorized Roller, 15:1, 230V
	74MP(WW)013423EN	Motorized Roller, 13:1, 230V
	74MP(WW)011423EN	Motorized Roller, 11:1, 230V
	74MP(WW)010423EN	Motorized Roller, 10:1, 230V
	74MP(WW)009423EN	Motorized Roller, 9:1, 230V
	74MP(WW)030443EN	Motorized Roller, 30:1, 460V
	74MP(WW)024443EN	Motorized Roller, 24:1, 460V
	74MP(WW)020443EN	Motorized Roller, 20:1, 460V
	74MP(WW)018443EN	Motorized Roller, 18:1, 460V
	74MP(WW)016443EN	Motorized Roller, 16:1, 460V
	74MP(WW)015443EN	Motorized Roller, 15:1, 460V
	74MP(WW)013443EN	Motorized Roller, 13:1, 460V
	74MP(WW)011443EN	Motorized Roller, 11:1, 460V
	74MP(WW)010443EN	Motorized Roller, 10:1, 460V
	74MP(WW)009443EN	Motorized Roller, 9:1, 460V

ltem	Part Number	Description			
2	807-1424	Pull Pin,			
		.25" x 2.25"			
3	807-1448	Nylon Lanyard			
4	500050	Guard Block			
5	500055	Drive Gear			
6	500061	Right Hand Ear Assembly			
7	500062	Left Hand Ear Assembly			
8	506242-WW	End Key			
9	506243	Mid Key			
10	506246	Retaining Ring			
11	506247	Swing Locking Guard			
12	506249-WW	End Key			
13	506244	Clamp Key			
Motor	Motorized roller part numbers (where (WW) = width)				

7400, 7600 and Ultimate Series Motorized Roller

7400 Ultimate Motorized Roller

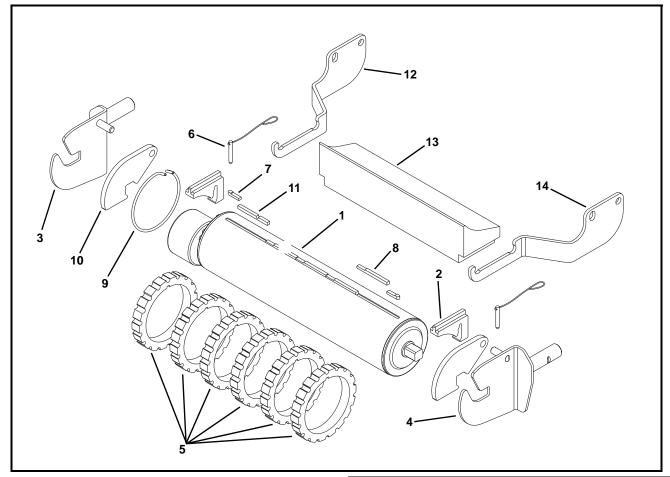


Item	Part Number	Description
1	74MP(WW)030423EN	Motorized Roller, 30:1, 230V
	74MP(WW)024423EN	Motorized Roller, 24:1, 230V
	74MP(WW)020423EN	Motorized Roller, 20:1, 230V
	74MP(WW)018423EN	Motorized Roller, 18:1, 230V
	74MP(WW)016423EN	Motorized Roller, 16:1, 230V
	74MP(WW)015423EN	Motorized Roller, 15:1, 230V
	74MP(WW)013423EN	Motorized Roller, 13:1, 230V
	74MP(WW)011423EN	Motorized Roller, 11:1, 230V
	74MP(WW)010423EN	Motorized Roller, 10:1, 230V
	74MP(WW)009423EN	Motorized Roller, 9:1, 230V
	74MP(WW)030443EN	Motorized Roller, 30:1, 460V
	74MP(WW)024443EN	Motorized Roller, 24:1, 460V
	74MP(WW)020443EN	Motorized Roller, 20:1, 460V
	74MP(WW)018443EN	Motorized Roller, 18:1, 460V
	74MP(WW)016443EN	Motorized Roller, 16:1, 460V
	74MP(WW)015443EN	Motorized Roller, 15:1, 460V
	74MP(WW)013443EN	Motorized Roller, 13:1, 460V
	74MP(WW)011443EN	Motorized Roller, 11:1, 460V
	74MP(WW)010443EN	Motorized Roller, 10:1, 460V
	74MP(WW)009443EN	Motorized Roller, 9:1, 460V

ltem	Part Number	Description		
2	500050	Guard Block		
3	500055	Drive Gear		
4	500067	Right Hand Ear Assembly		
5	500068	Left Hand Ear Assembly		
6	501488	Pull Pin w/Lanyard		
7	506242-WW	End Key		
8	506243	Mid Key		
9	506246	Retaining Ring		
10	506247	Swing Locking Guard		
11	506249-WW	End Key		
12	506244	Clamp Key		
Motorized roller part numbers (where (WW) = width)				

7400, 7600 and Ultimate Series Motorized Roller

7600 Ultimate Motorized Roller



Item	Part Number	Description
1	7UMP(WW)030423EN	Motorized Roller, 30:1, 230V
	7UMP(WW)024423EN	Motorized Roller, 24:1, 230V
	7UMP(WW)020423EN	Motorized Roller, 20:1, 230V
	7UMP(WW)018423EN	Motorized Roller, 18:1, 230V
	7UMP(WW)016423EN	Motorized Roller, 16:1, 230V
	7UMP(WW)015423EN	Motorized Roller, 15:1, 230V
	7UMP(WW)013423EN	Motorized Roller, 13:1, 230V
	7UMP(WW)011423EN	Motorized Roller, 11:1, 230V
	7UMP(WW)010423EN	Motorized Roller, 10:1, 230V
	7UMP(WW)009423EN	Motorized Roller, 9:1, 230V
	7UMP(WW)030443EN	Motorized Roller, 30:1, 460V
	7UMP(WW)024443EN	Motorized Roller, 24:1, 460V
	7UMP(WW)020443EN	Motorized Roller, 20:1, 460V
	7UMP(WW)018443EN	Motorized Roller, 18:1, 460V
	7UMP(WW)016443EN	Motorized Roller, 16:1, 460V
	7UMP(WW)015443EN	Motorized Roller, 15:1, 460V
	7UMP(WW)013443EN	Motorized Roller, 13:1, 460V
	7UMP(WW)011443EN	Motorized Roller, 11:1, 460V
	7UMP(WW)010443EN	Motorized Roller, 10:1, 460V
	7UMP(WW)009443EN	Motorized Roller, 9:1, 460V

Item	Part Number	Description		
2	500052	Guard Block		
3	500065	Right Hand Ear Assembly		
4	500066	Left Hand Ear Assembly		
5	500069	Drive Sprocket		
6	501488	Pull Pin w/Lanyard		
7	506238	End Key		
8	506239	Mid Key		
9	506246	Retaining Ring		
10	506247	Swing Locking Guard		
11	506240	Clamp Key		
12	500071	Right Hand Bracket		
13	500074-(WW)	Limiter		
14	500070	Left Hand Bracket		
Motorized roller part numbers (where (WW) = width)				

Notes

Return Policy

Returns must have prior written factory authorization or they will not be accepted. Items that are returned to Dorner without authorization will not be credited nor returned to the original sender. When calling for authorization, please have the following information ready for the Dorner factory representative or your local distributor:

1. Name and address of customer.

- 2. Dorner part number(s) of item(s) being returned.
- 3. Reason for return.
- 4. Customer's original order number used when ordering the item(s).
- 5. Dorner or distributor invoice number (if available, part serial number).

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization (RMA) number for reference. RMA will automatically close 30 days after being issued. To get credit, items must be new and undamaged. There will be a return charge on all items returned for credit, where Dorner was not at fault. It is the customer's responsibility to prevent damage during return shipping. Damaged or modified items will not be accepted. The customer is responsible for return freight.

Conveyors and conveyor accessories

Standard catalog conveyors	30%
MPB, 7200, 7300 Series, cleated and specialty belt	50%
AquaGard & AquaPruf Series conveyors	non-returnable items
Engineered to order products	case by case
Drives and accessories	30%
Sanitary stand supports	non-returnable items

Parts

Standard stock parts	
Plastic chain, cleated and specialty belts	

30% non-returnable items

Returns will not be accepted after 60 days from original invoice date. The return charge covers inspection, cleaning, disassembly, disposal and reissuing of components to inventory. If a replacement is needed prior to evaluation of returned item, a purchase order must be issued. Credit (if any) is issued only after return and evaluation is complete.

Dorner has representatives throughout the world. Contact Dorner for the name of your local representative. Our Customer Service Team will gladly help with your questions on Dorner products.

For a copy of Dorner's Warranty, contact factory, distributor, service center or visit our website at www.dorner.com.

For replacement parts, contact an authorized Dorner Service Center or the factory.



Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2010

DORNER MFG. CORP.

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